SECOS
Elektronische Bauelemente

SR5100K
Voltage 100 V
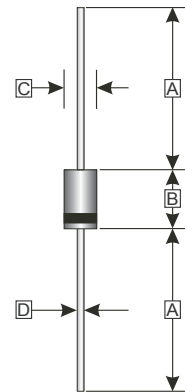## 5.0 Amp Schottky Barrier Rectifiers

FEATURES

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction

MECHANICAL DATA

- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Solderable per MIL-STD-202, method 208 guaranteed
- Polarity: As Marked
- Mounting position: Any
- Weight: 1.10 grams (approximately)

DO-27

ESD
Protection Diode
±8KV

REF.	Millimeter	
	Min.	Max.
A	25.4 (TYP)	
B	7.20	9.53
C	5.00	5.60
D	1.20	1.32

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load. For capacitive load, de-rate current by 20%.
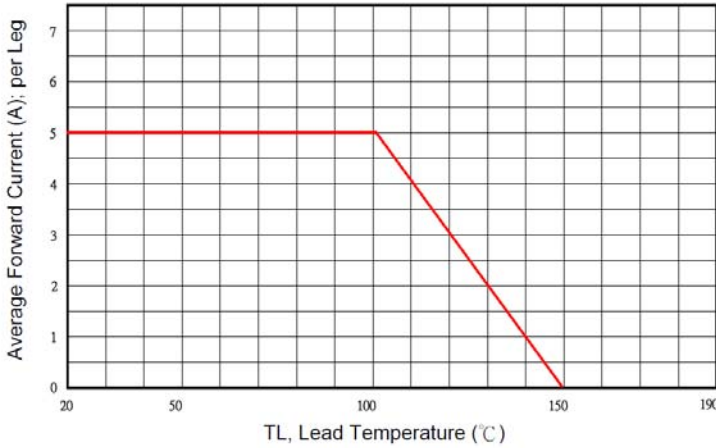
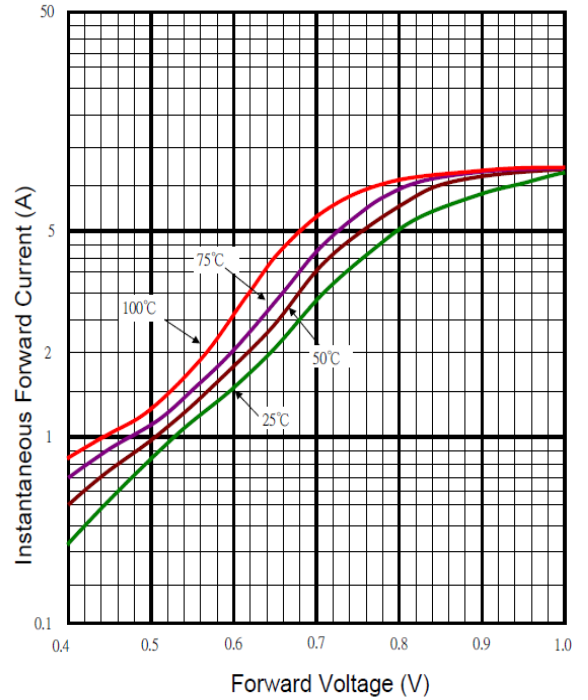| Parameter		Symbol	Rating	Unit
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	100	V
Working Peak Reverse Voltage		V_{RWM}	100	V
Maximum DC Blocking Voltage		V_{DC}	100	V
Maximum Average Forward Rectified Current (See Fig.1)		I_{AV}	5	A
Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)		I_{FSM}	150	A
Instantaneous Forward Voltage	I_F=5A, T_F=25°C	V_F	0.82	V
	I_F=5A, T_F=100°C		0.7	
Maximum DC Reverse Current at Rated DC Blocking Voltage [3]	T_A=25°C	I_R	0.5	mA
	T_A=100°C		20	
Typical Junction Capacitance [1]		C_J	700	pF
Typical Thermal Resistance [2]		$R_{\theta JL}$	10	°C / W
Electrostatic Discharge		V_{ESD}	±8	kV
Operating & Storage Temperature		T_J , T_{STG}	-50~150, -65~175	°C

Note:

1. Measuredat 1 MHz and applied reverse voltage of 5.0V D.C
2. Thermal Resistance Junction to Lead.
3. Pulse test: 300uS pulse width, 1% duty cycle.

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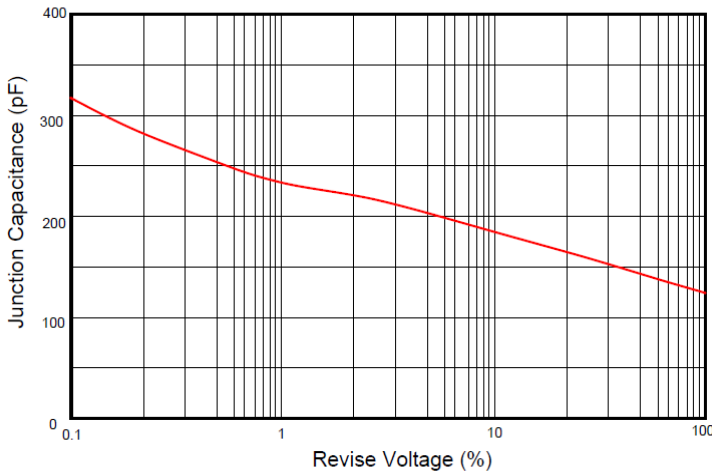
RATINGS AND CHARACTERISTIC CURVES

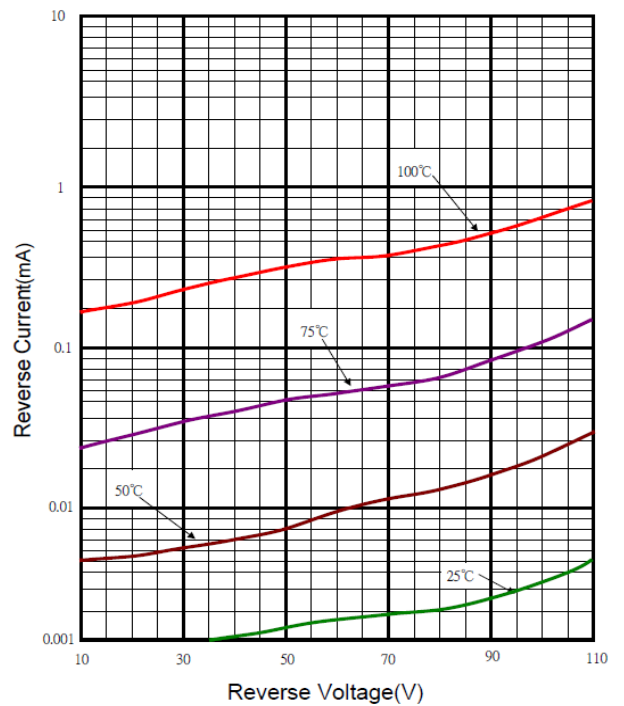Typical Forward Current Derating Curve

Typical Forward Characteristic

Typical Junction Capacitance

Typical Reverse Characteristic

Maximum Non- Repetitive Forward
Surge Current